

Information provided by Robert K. Lawrence, MDC Forest Entomologist

Horned oak galls and **gouty oak galls** continue to be reported at high levels on pin oaks and shingle oaks in Missouri, especially in the St. Louis area. These branch galls, created by Cynipid wasps, build up in numbers over time resulting in increasing branch dieback and tree decline.

Japanese beetle populations remain at high levels around St. Louis and Springfield , MO. This exotic scarab was first detected in New Jersey during 1916. It has spread throughout the eastern US.



Larva of loblolly pine sawfly. Photo by RKL.

The **loblolly pine sawfly** caused isolated pockets of severe defoliation of shortleaf pine and a few planted loblolly pines across southern Missouri. The

widely scattered pockets consisted of one to 50 trees each. Loblolly pine sawfly populations can be extremely heavy on just a few trees, causing near complete defoliation. However, they feed primarily on previous year's foliage, usually leaving the new expanding needles. Tree mortality does not normally occur from one year of defoliation by these insects, although trees will be stressed and more vulnerable to other insects (e.g. bark beetles) and diseases. Growth loss often occurs.



Branches defoliated by loblolly pine sawfly. Photo by RKL.

Loblolly pine sawflies look similar to European pine sawflies, except the loblolly variety has a reddish-brown head, instead of black. There is only one generation of loblolly pine sawflies per year.

The **hemlock woolly adelgid**, an exotic insect pest not normally seen in the Central States, was found on an ornamental hemlock growing in Springfield , MO , in late June. Tree care company employees recognized the cottony masses as potentially being the hemlock woolly adelgid and reported it to a Missouri Department of Conservation forester. Only one of five hemlocks planted three years ago at a suburban residence appeared to be infested. Hemlocks are rarely planted in Missouri , so this introduction of the adelgid is not a threat to Missouri trees. Nevertheless, the incident does demonstrate: 1) how easily exotic pests can be moved even to unlikely locations, and 2) the value of having tree care professionals who are knowledgeable about exotic pests.